Water Quality Division Workplan
FY 2006 Report Card
Period: 7/1/05 thru 6/30/06

DIRECTOR=S OFFICE - Data Management And Assessment Group – Great year

Water quality monitoring data loading to STORET was initiated and will be completed by November 2006.

Surface Water Monitoring Program: - Good year
Staff completed all scheduled stream monitoring in the Upper Gila River and Santa Cruz River basins as per FY 06 sample plan by June 30, 2006. There were a significant number of staff changes in the monitoring unit in FY 06 which delayed development of the FY 07 sample plan. Four of the five field staff who implement ambient water quality monitoring left in FY 06 for various reasons: retirement, transfers, medical reasons, and re-organization of the Surface Water Section. The reorganization established a new Monitoring Unit that is under new leadership and the hiring of replacement staff is ongoing. ADEQ will integrate scheduled FY 07 sampling in the Little Colorado River (LCR) basin with REMAP grant objectives and implement a probabilistic monitoring design in FY 07 in the LCR for the first time. Final draft of the Comprehensive Monitoring Strategy [CMS] document was delayed, in part, due to reorganization of the Surface Water Section and staff changes.

Good year for the Lakes Program, given staff turnover. FY 06 saw the loss of three (out of 5) Lakes Program staff and only one replacement staff has been hired to date. With the turnover and staff shortage, two lakes did not receive a final sampling event for sample year '06, though in both cases, these lakes have sufficient data from previous years to assess in 2006. All other deliverables were met, however, for ambient sampling in addition to EPA approval of the Lakeside Lake TMDL and completion of the Alamo Lake TMDL. Additional progress has been made on the Lake Mary Watershed TMDL and work was initiated on the Parker Canyon Lake TMDL. Data have been collected throughout the year at the new Mercury Deposition Network site in Sycamore Canyon. In addition, staff collected dry deposition data for mercury at three locations within the state. This year was not as bad as the previous year for fish kills on the Salt River reservoirs, but many urban lakes have suffered toxic algal blooms. Other achievements include: finalization of the Matrix to support interpretation of the narrative nutrient standard in lakes; participation in planning for the upcoming National Lakes Survey; and two invitations to present at national conferences.

Good Year for Priority Pollutant Program. After receiving a scientific collecting permit, the Priority Pollutant Sampling and Fish Consumption Advisory Program sampled or completed sampling of 13 sites in FY 06 with assistance from Region 9 EPA and the Arizona Game and

Fish Department. Sample data are presently being analyzed and/or collated. An ADEQ implementation guidance for the proposed fish consumption standard for tissue methylmercury is presently in the final stages of development and standardization with the recently released National guidance.

EPA Comments:

Monitoring program seems on-track with various projects. The re-organization of this section does not appear to have created significant delays in productivity. To facilitate ADEQ's effort to establish their own fish sampling program, Region 9 provided an electro shocking boat and trained ADEQ staff to use the equipment. Region 9 lab has also provided analytical support to ADEQ for mercury analyses in fish tissue. Region 9 also loaned the Tekran mercury air monitoring equipment in FY06. This technical support will continue into FY07.

We are pleased the ADEQ's REMAP project will be funded by ORD for 2 years and it will accomplish monitoring via probabilistic design as well as side-by-side sampling. ADEQ has also stepped forward to fully participate in EPA's Lakes Survey to occur in FY07.

We understand ADEQ has nearly completed the Final draft Comprehensive Monitoring Strategy; we hope to receive it in Oct. and anticipate it will stimulate more discussion and further enhancement of the state's approach to surface water monitoring. The state should utilize their strategy for planning to spend the extra 106 Monitoring Initiative monies provided by EPA in FY05 and FY06. We have forwarded the HQ memo (dated July 11, 2006) and supplemental workplan (spreadsheet) to ADEQ. We encourage the state to complete it soon in order to receive the FY06 funds. We will continue coordinate on this item.

TMDL Analyses: - Good year

It was a good year for TMDL Development, despite the expected low bean count. ADEQ submitted the Alamo Lake Mercury TMDL to EPA in June. Approval is pending the resolution of NPDES permit limit and allocation issues. The Turkey Creek Copper and Lead TMDL report and the public comment and notice periods have been completed. The report will be submitted to EPA for approval by end of September. The Lake Mary Regional Mercury TMDL has been delayed due to staff turnover. Modeling has been completed and the report is being drafted. Submission to EPA should occur by the end of calendar year '06. Modeling for the Pinto Creek site specific objective (SSO) has been completed and the new standard is being included as part of the triennial review package. Submission of the TMDL will be delayed until the SSO is adopted into rule. Sampling to determine the Mule Gulch SSO has been delayed due to low rainfall amounts and staff shortages. TMDL staff turn-over in FYO6 was high, but only one vacancy remains.

The summer monsoon season of 2005 brought below normal rainfall and delayed sample collection on several projects. The 2006 monsoon season, however, has been excellent in terms of collecting data for the Queen Creek, San Pedro and Parker Canyon Lake projects. Staff

installed a wet deposition collector at a northern AZ background site in April '06. EPA Region 9's Tekran atmospheric mercury concentration sampler was deployed at three sites over approximately 3 months in early 2006. Modeling efforts by ADEQ's Air Division to determine deposition rates are ongoing. New projects initiated include Cave Creek and two segments of the Upper Gila River.

TMDL Effectiveness and Implementation - Great year given staff turn-over. Current staffing levels have allowed two staff members to devote the majority of their time to these important functions. Implementation plans have been drafted for Tonto Creek (final draft), Alum Gulch, Pinto Creek, and Lakeside Lake. All of these projects have interested stakeholders and remediation efforts are being planned. Boulder Creek remediation efforts have been delayed once again as ADEQ tries to organize the landowners and managers. Remediation efforts in the four target watersheds (Boulder, Turkey, Alum, and Pinto) included in EPA's performance measures are progressing with on-the-ground work beginning in the fall on Turkey and Pinto Creeks. Watershed coordination is ongoing with attendance at approximately 2-3 meetings or workshops each month to educate stakeholders in development. Effectiveness Sampling and Analysis Plans have been drafted for Alum Gulch and Turkey Creek. The Nutrioso Creek effectiveness data review has been completed resulting in the segmenting and proposed delisting of upper Nutrioso Creek for turbidity.

EPA Comments:

The TMDL program made average progress this year despite low production of completed TMDLs in FY06. Both agencies have contributed to resolving the technical issues for Alamo Lake mercury TMDL; nonetheless, it will likely need additional time for public comment prior to final submittal. Turkey Creek metals TMDLs were delivered in September, albeit overdue from FY05. Both agencies acknowledge the Pinto Creek copper TMDLs will be delayed into FY07 because a WQS change is required.

Nutrioso Creek is a success story for TMDLs since the effectiveness data review demonstrated the turbidity WQS was being met. We look forward to ADEQ reports of similar WQ improvements in the four targeted watersheds or other previously impaired waterbodies.

Water Quality Assessment: Good year

The Status of Water Quality in Arizona – 2004, Arizona's Integrated §305(b) and §303(d) Listing Report was re-issued in July 2005 to include EPA revisions to the state's §303(d) list of impaired waters. Tetra Tech and ADEQ staff completed work on Phase I of the Assessment Calculator tool which was used successfully by assessment coordinators for the first time to compile data for the draft 2006 water quality assessment. ADEQ did not complete the 2006 assessment by April 1, 2006 because of the loss of one of two assessment coordinators and continuing problems inputting outside data into the Surface Water Quality Database so it could be used for assessment purposes. The Draft 2006 Assessment and Assessment Methods document is now complete and undergoing management review for approval before initiating public participation process in the Fall of 2006. The Final 2006 Assessment is scheduled for completion by December 31, 2006.

EPA Comments:

We commend ADEQ for continuing to produce high quality Integrated Reports of WQ assessment. We also appreciate that ADEQ staff entered the underlying information into the Assessment Database (ADB) and submitted this to HQ, who utilizes ADB to track status and progress of each waterbody. ADEQ has also helped Region 9 to clarify the ADB entries (i.e., resolve a few discrepancies) with HQ; thus the 2004 ADB was finalized in FY06.

We note the 2006 assessment decisions will be developed based on methods used in 2002 and 2004, since revisions to the existing IWIR have not been accomplished in FY06. The state appears to be working on the problem of incorporating outside data into their Surface Water Quality Database. For each WQ assessment, Region 9 expects the state to evaluate all available information and data, even if it outside data and cannot be transposed into the state's internal database. We look forward to reviewing the draft 2006 IR and receiving the final 2006 IR in timely fashion.